on the author's personal experiences in over one thousand cases of various diseases where positive and favorable effects were obtained by this method of treatment. In this country but few physicians have made such extensive trials of these measures, and the good results obtained by Professor Bier with this method should animate others to make further experiments and to add their knowledge gained to this interesting department of therapeutics. S. E. J.

HIGH-FREQUENCY CURRENTS IN THE TREATMENT OF SOME DISEASES. By CHISHOLM WILLIAMS, F.R.C.S. EDIN., etc. London: Rebman, Limited, 1903.

IN this work the author offers "a short account of the treatment of some diseases by means of electric currents of high frequency and high potential." The main source of the account is given as from the author's own practice, supplemented by selections from "diverse journals not readily accessible to the busy practitioner." His experience with the therapeutic use of these currents dates from 1898, and in his introduction he at once arouses interest by stating that high-frequency currents "have been proved to produce extraordinary and peculiar results in the alleviation of some diseased conditions."

Certainly the uniformly excellent results secured by him in "atonic dilatation of the stomach—results far in advance of those obtainable in the same length of time by any other therapeutic agent—stir up hope that here is a form of treatment worthy of extended trial. The scope of the work includes a discussion of the different "sources of energy," of various apparatus, of the properties of the currents from physical and physiological standpoints, and lastly a consideration of therapeutic methods.

While we agree with the statement that a "certain amount of elementary electric knowledge is necessary," we cannot recommend the "elementary electrophysics" which the author gives as being either accurate or useful. The following archaic view of what takes place in a primary battery when the external circuit is closed will serve as an illustration: After describing a cell in which plates of copper and zinc are immersed in dilute sulphuric acid, he goes on to state, "When the electricity generated is allowed to circulate externally by joining the plates one notices that on each plate gas bubbles are formed from the electrolytic decomposition of the water, hydrogen and oxygen being liberated, and these bubbles interfere more or less with the chemical activity between the liquid and the metals, so that the E. M. F. and with it the tension tend to rapidly decrease; this action is termed polarization."

Now, the oxygen and hydrogen gases set free at the electrodes are obtained as the result of a secondary action in the dilute sulphuric acid (the electrolyte): in this, while the hydrogen is set free at the kathode, the negative ions of SO_4 decompose the water at the anode and combine with its hydrogen to form hydrogen sulphate and set the oxygen free; the term polarization refers to the production in the cell of an electromotive force counter to the normal one.

Under the head of Sources of Energy are discussed primary and secondary batteries, commercial electric mains, and static machines. The author's description of a static machine is not applicable to the associated cut on page 42, which is directly referred to. The machine is stated to "produce electricity by friction," whereas it is really generated by induction, the difference of potential existing between the disks at rest being increased by rotation.

In the chapter devoted to the description of apparatus the "elementary electrophysics" is of a nature to arouse interest. We quote as a sample from page 105: "Most of us have seen the experiment of two tuning forks tuned to the same pitch giving the same harmonic. If one be vibrated by a blow or by the fingers the second fork will start vibrating by itself and give off the same harmonic; because it is syntonous or vibrating in unison with the former, it will reinforce the sound given by the first vibrator." Now, the tone of the tuning fork is a practically simple one—*i. e.*, a fundamental one—the overtones being inappreciable, and therefore the term harmonic is inaccurate; the second tuning fork *responds* to the tone of the first; it does not reinforce. This is based on the well-known principle of sympathetic vibrations.

The book will prove of interest to electrotherapeutists for the reason that it gives the opinions of a man of considerable practical experience as to the selection and use of the apparatus essential in the production of high-frequency currents. H. M. W.

A TEXT-BOOK OF DISEASES OF WOMEN. By BARTON COOKE HIRST, M.D., Professor of Obstetrics in the University of Pennsylvania; Gynecologist to the Howard, the Orthopedic, and the Philadelphia Hospitals. Pp. 683, with 655 illustrations, many of them in colors. Philadelphia, New York, and London: W. B. Saunders & Co., 1903.

DR. HIRST has been a consistent advocate of the opinion entertained in Germany that obstetric and gynecic surgery should always be combined. The present work, he announces in the preface, is "a companion volume to the author's *Text-book of Obstetrics*, the two volumes covering the whole subject of gynecology." Knowing as we do his unusual experience in both branches, as well as his high reputation as a teacher and indefatigable worker, we are prepared to find his latest work a valuable addition to the literature.